

SHILOVA, S.A., TROITSKIY, V.B.

Some specific features of the attacks of bloodsucking insects upon
birds [with summary in English]. Biul.MOIP.Otd. biol. 63 no.4:37-42
Jl-Ag '58 (MIRA 11:11)

(URAL MOUNTAIN REGION—DIPHTERA)
(PARASITES—PASSERES)

SEILOVA, S. A., USTINOVA, A. P., PETROVA, N. V., TKACHENKO, N. N.,
KOROVINA, A. G., GLADIKH, S. G.

"Antitick measures in the nidi of spring-summer encephalitis."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists,
and Infectionists, 1959.

SHIL'KO, I. A., KIL'NIK, L. V., PERINA, A. P.

"A virological and serological examination of the focus of tickborne encephalitis in the Perm' oblast." Page 71.

Desyatoye soveshcheniye po parazitologicheskim problemam i prirodnoochagovym bolezniam. 22-29 Oktjabrya 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 254pp.

SHILOVA, S. A. and MAL'KOV, G. B.

"Use of Systemic Poisons Against Rodents and Their Ectoparasites in
Nidi of Tick-Borne Encephalitis."

Tenth Conference on Parasitological Problems and Diseases with Natural
Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of
Sciences, USSR, Moscow-Leningrad, 1959.

Perm Oblast Health and Epidemiology Station and Central Disinfection Re-
search Institute, (Moscow)

SHILOVA, S. A.

"The importance of vertebrates in the formation of foci of tick-borne encephalitis." p. 96

Desnyatova soveshchaniye po parazitologicheskim problemam i prirodnym zoonozam boleznyam. 22-29 Oktabria 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 251 pp.

Central Scientific- Research Inst. of Disinfection Moscow

SHILOVA, S.A.

Biological foundations of epidemiological prognosis of tick-borne
encephalitis. Biul. MOIP. Otd. biol. 65 no.1:37-47 Ja-7 '60.
(MIRA 13:7)

(PERM PROVINCE---ENCEPHALITIS)
(TICKS AS CARRIERS OF DISEASE)

SHILOVA, S.A.; CHABOVSKIY, V.I.

Species of vertebrate animals serving as hosts to *Ixodes persulcatus*
P.Sch. within the range of this species. Biol. MOIP. Otd. biol. 66
no. 5:40-51 8-0 '60. (MIRA 13:12)

(TICKS—HOST ANIMALS)

SHILOVA, S.A.; CHABOVSKIY, V.I.; MOROZOV, Yu.V.; SIMKIN, G.N.;
VASIL'YEV, B.D.; KRYLOV, D.G.; GOLOVLEV, Ye.L.

Epizootiological importance of birds in foci of tick-borne
encephalitis in the Central Urals. Ornitologiya no.6:126-
139 '63. (MIRA 17:6)

SHILOVA, S.A.

Possibilities of prognostic estimation of tick-borne encephalitis.
morbidity rate. Med. paraz. i paraz. bol. 32 no.3:296-302 My-Je '63
(MIRA 17:3)

1. Iz Tsentral'nogo nauchno-issledovatel'skogo dezinfektsion-
nogo instituta (dir.- prof. V.I. Vashkov).

4C
L 23503-65 EWT(1)/EWP(e)/EWT(m)/EWP(k)/EED-2/EWP(b)/EWP(t) IJP(e) JD
S/0225/64/000/006/0035/0042 2-B

ACCESSION NR: AP5001590

AUTHOR: Gritsan, D. N., Serpukhova, L. N.; Zhurov, G. A.; Leykina, R. Sh.; Krusina, N. G.; Buravlev, A. T.; Yefremova, M. M.; Tyutina, V. K.; Shilova, A. V.

TITLE: Electrolytic method for obtaining powder for the manufacture of ferrites

SOURCE: Poroshkovaya metallurgiya, no. 6, 1964, 35-42

TOPIC TAGS: nickel zinc ferrite, electrodeposition, powder metallurgy, ferrite manufacture, hydroxide precipitation

ABSTRACT: The authors describe their electrolytic method for obtaining a mixture of iron, nickel, and zinc hydroxides with a prescribed composition. The method can also be used to obtain a mixture of hydroxides completely free of extraneous metal ions and therefore not requiring special washing. By subsequent heat treatment, a mixture of oxides of a given composition can be obtained from the hydroxide mixture for the manufacture of nickel-zinc ferrites. This electrolytic method of obtaining nickel-zinc ferrite powders is based on the joint anodic solution of iron, nickel, and zinc in the electrolytic cell and simultaneous precipitation of the ions as hydroxides by the hydroxyl ions generated at the cathode. To elicit

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ACCESSION NR: AP3C01590

the possibility of controlling the composition of the hydroxide mixture, the authors studied the kinetics of the electrodeposition of the hydroxide of each metal separately, the completeness of their deposition, and the conditions under which the poorly soluble compounds would not be deposited on the electrodes and would not passivate them. The experiments were conducted at 20 and 90°C. Electrolysis was carried out in a glass vessel; the anode was a plate made of the test metal and the cathode was a plate of stainless steel or other metal. Aqueous solutions of various salts and acids were used as the electrolyte, the most suitable being diluted solutions of NaCl, KOH, or HCl. The HCl solutions made it possible to obtain very pure hydroxide mixtures that did not require washing. Orig. art. has: 1 table and 8 figures.

ASSOCIATION: Khar'kovskiy gosuniversitet im. A. M. Gor'kogo (Khar'kov state university)

SUBMITTED: 25Nov63

ENCL: 00

SUB CODE: MM,IC

NO REF SOV: 002

OTHER: 000

Card 2/2

SHILOVA, S. M.

Spinach

"Growing spinach in winter." Sad i og. no. 2, 1952

Monthly List of Russian Accessions. Library of Congress October, 1952. UNCLASSIFIED

1. SHTICVA, S. N.
2. USSR (600)
4. Celery
7. Growing parsley and celery seeds in the South. Sad i og. no. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

SHILOVA, T.I.

USSR/Medicine - Rodents
Medicine - Leucocytes, Count
Apr 49

"Seasonal Changes in Leucocyte Count of Rodents
(Yellow-Throated Mouse, Apodemus Flavicollis
Melch.)," T. I. Shilova, Biol Inst, Khar'kov
State U imeni A. M. Gor'kiy, 4 pp

"Dok Ak Nauk SSSR" Vol LXV, No 4

Studied seasonal changes of this form because it
is a carrier of the virus of Russian tick-borne
encephalitis in the nidi of this infection and
undoubtedly may involve epizootic tularemia.
Drew up 2-page table for differential counts of

41/49T53

USSR/Medicine - Rodents (Contd) Apr 49

yellow-throated mice in Sep 47, Mar 48, Jun-Jul 48,
and Oct-Nov 48. Submitted by Acad L. A. Orbeli,
3 Feb 49.

41/49T53

SHIWA, T.I., Inzh.; SHIHOV, P.D., Inzh.

Active control of the lapping process. Mashinostroenie no.3:

53-54 My-Je '64.

(MIRA 17:11)

SHILOVA, V.

We are improving technology. Prot.koop.13 no.9:8 S '59.
(MIRA 13:1)

1. Smenny master tsekha No.1 Moskovskoy arteli invalidov
"Znamya truda".
(Clothing industry)

SHILOVA, Ye. A.

Testing the precision of threadgrinding machines. Stan. 1 instr. 26
no. 8:29-31 Ag'55. (MLRA 8:12)
(Screw-cutting machines)

MAYOROVA, E.A.; SHILKIN, O.D.; VASIL'YEV, V.A.; SHILOVA, Ye.A.

Plastic gears for jig-boring machines. Stan.i instr. 33 no.9:10-14
S '62. (MIRA 15:9)

(Drilling and boring machinery)

KIRILOVA, T.S.; SHILOVA, Ye.A.

Errors in measuring the periodic deviation of the pitch of a lead
screw. Izv.tekh. no.7:8-10 JI 52. (MIRA 15:6)
(Screws—Testing)

SHKHOV, V.A.; SHILOVA, Ye.A.

Analyzing cyclic errors of thread-grinding and screw-cutting machines.

Stan. i instr. 34 no.2:22-24. 1963.

(MIRA 16:5)

(Screw-cutting machines)

MAYOROVA, E.A.; SHILOVA, Ye.A.; SHILKIN, O.D.; IL'INA T.S.

Molding gear wheels of caprolan. Stan. 1 instr. 35 no.6:
23-25 Je '64 (MIRA 17:8)

SPITSE, Y. A., KAMECHNEV, V. S.

Tap for cutting high-precision nuts. Mashinostroitel' no. 3:26
Mr '65. (MIRA 18:4)

SHILOVA, Ye. I.; LIVANOV, V. A.; GOLOKHIMATVA, T. N.; and NIKITAYEVA, O. G.

"Ways of Strengthening Aluminum Alloys for Performance at Elevated Temperatures.

"Changes in the Mechanical Properties of Aluminum-Copper-Magnesium Alloys Produced by Plastic Deformation in the Freshly Quenched State and by Short-time Annealing at 200⁰ C.

Light alloys and their heat treatment. 1981. 120 p. (Izv. AN SSSR, 1981, 1, 1-120)
Principal Rep. r's of the Conference, "Sov. Izd. v. AN SSSR, 1981, 1, 1-120"

SOV/137-58-10-21658

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 173 (USSR)

AUTHORS: Livanov, V.A., Shilova, Ye.I., Golokhmatova, T.N.,
Nikitayeva, O.G.

TITLE: Methods of Hardening Aluminum Alloys Intended for Operation
at Elevated Temperatures (Puti uprochneniya alyuminiyevykh
splavov dlya raboty pri pov/shennykh temperaturakh)

PERIODICAL: V sb.: Legkiye splavy. Nr 1. Moscow, 1958, pp 88-122

ABSTRACT: Investigations were performed in order to determine the
effect of various degrees of cold hardening, as well as of con-
ditions of artificial aging (AA), on the mechanical properties
of sheets of D16 alloy (A) at room temperature and at elevated
temperatures. The initial material consisted of hot-rolled
sheets of the D16 A which had been tempered only, or were
tempered and subjected to natural aging for a period of five
days; the sheets of the A were work-hardened by means of rol-
ling with reductions equivalent to 5, 10, 15, 20, 25, and 30%.
AA of work-hardened sheets, as well as sheets which have not
been so treated, was accomplished at temperatures of 150,
170, 190, and 200°C, the soaking time being 6, 8, 10, and 12

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SOV/137-58-10-21658

Methods of Hardening Aluminum Alloys (cont.)

hours, respectively. Optimal AA conditions, established on the basis of studies of properties of the A's at room temperature, were maintained during tests at elevated temperatures. The laws governing the changes occurring in the properties of the A relative to the temperature of AA are identical both at room temperature and at elevated temperatures. Specimens which have been aged at 170-180° possess maximal values of σ_s and σ_b , but exhibit very low values of δ . At lower temperatures of AA (130-150°), the strength characteristics of the A's are somewhat impaired, but the δ values are increased. Conducting the AA at a temperature of 190-200° results in a lowering of all mechanical properties of the A. It has been established that the strength of tempered and naturally aged D16 A is favorably affected by work hardening at temperatures of 100-200°. Work hardening (5-20% reduction) increases the σ_b of sheets of the D16 A by as much as 10-15% at a temperature of 100° and by 13-18% at a temperature of 150°. Optimal conditions for processing of sheets of D16 consist of tempering operations and work hardening by means of rolling with reductions of 5-20% followed by AA (130-150° for 10-20 hours). Problems on the nature of hardening of an A by means of mechanical working of it after the operations of tempering and prior to the process of AA are discussed. 1. Aluminum alloys--Hardening Card 2/2 1. Aluminum alloys--Temperature factors E.K.

SOV/137-58-11-23547
Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 11, p 242 (USSR)

AUTHOR: Shilova, Ye. I.

TITLE: Changes in the Mechanical Properties of Aluminum-copper-magnesium Alloys Under the Effects of Deformation in the Freshly-quenched Condition and of Short-term Heating at 200°C (Izmeneniye mekhanicheskikh svoystv splavov alyuminiy-med'-magniy pod vliyaniyem deformatsii v svezhezakalennom sostoyanii i kratkovremennogo nagreva pri 200°)

PERIODICAL: V sb.: Legkiye splavy. Nr 1. Moscow, 1958, pp 123-132

ABSTRACT: In alloys (A) consisting of Al+4.8% Cu+0.2% Mg, and in the standard D18 and V65 A, work-hardening by 2, 4, and 10% elongation has the result that the more work-hardened material has a higher σ_b up to 9 hours of aging time, while thereafter the curves for σ_b versus natural aging time intersect for various degrees of work-hardening, and when holding time is longer the more highly work-hardened material proves to be the weaker. The application of work-hardening in the freshly-quenched condition to the Al+3.7% Cu+1.3% Mg and Al+2.5% Cu+2.5% Mg A, as well as to D16, shows that the more highly work-hardened material retains an elevated σ_b after natural

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SOV/137-58-11-23547

Changes in the Mechanical Properties of Aluminum-copper-magnesium Alloys (cont.)

aging for up to 10 days, and the curves of σ_b versus natural aging time for different degrees of work-hardening do not intersect. The Al+5% Cu, Al+4% Cu+1% Mg and D1 alloys represent a case intermediate between the foregoing. A short-term heating of the investigated A at 200°C for 10 days results in a reduction in σ_b due to recovery. The magnitude of this diminution proves different in different A. In A having a constant total Cu and Mg content of 5% the softening declines as the Mg contents increase.

L. R.

Card 2/2

SHILOVA, Ye.I.

Qualitative composition of lysimetric waters in some Podzol
types [with summary in English]. Vest.LGU 13 no.21:5-18
'58. (MIRA 11:12)
(Leningrad Province--Podzol) (Soil percolation)

35025
S/589/61/000/000/016/020
D205/D303

18.1210(240P)

AUTHORS: Shilova, Ye.I., and Nikitayeva, O.G.

TITLE: Influence of plastic deformation on the weakening processes of the duralumin type alloy D 19 (D19) in the temperature range 175 - 300°C

SOURCE: Fridlyander, I.N., V.I. Lobatkin, and Ye.D. Zakharov, eds. Deformiruyemye aluminievyye splavy; sbornik statey, Moscow, 1961, 124 - 130

TEXT: A study of the structural changes taking place in a solid solution type alloy, under the influence of plastic deformation. Plated sheets of D19 (3.88 % Cu; 1.88 % Mg; 0.7 % Mn; 0.3 % Fe and 0.25 % Si) prepared under industrial conditions were used. For the desired coarse-grained structure the sheets were annealed, before hardening, by heating for 4.5 hours at 380 - 400°C and cooled at a rate of 50°C/hour to 250°C and then in air. The sheets were then quenched in a saltpeter bath to 512 - 513°C, held for 15 minutes and quenched in water. They were then adjusted by straightening and stretching.

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S/689/61/000/000/015/020
D205/D303

Influence of plastic deformation on ...

ing with a total deformation of $\sim 2\%$. A portion of the sheets was left without adjustment. After natural ageing of 3 months the sheets were deformed to the extent of 5, 10, 15 and 20 % and heated for different times at 175, 200, 225, 250, 300 and 400°C. Strength limit, yield point, relative elongation, microstructure, electrical resistance and the fine structure were investigated. In the hardened state, deformation has the highest influence on the yield point and a much lower one on the strength limit. The change in relative elongation is diametrically opposed to that of yield point. Heating at the temperatures of the weakening range brings further considerable changes in the mechanical properties. It is shown that the plastic deformation causes two different structural changes which have different effects on the mechanical properties of the heated (in the weakening range of 175 - 300°C) specimens. One structural change is the distortion of the crystalline lattice which causes the decomposition of the solid solution during heating, leading to worse mechanical properties. On the other side the plastic deformation leads to the formation of a bloc structure which helps to preserve the high-strength characteristics up to 300°C. The substructural strengthening is more stable to heating than that induced by alloying. The best properties of the

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Influence of plastic deformation on ...

S/689/61/000/000/016/08
D205/D303

investigated alloys were achieved at 2 - 5 % deformation. There are
3 figures and 14 references: 12 Soviet-bloc and 2 non-Soviet-bloc.
The reference to the English-language publication reads as follows:
Murakami and Kovano, J. Japan, Inst. Metals, 1957, v. 21, pp. 724 -
726.

X

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20265

S/180/61/000/002/003/012
E073/E535

11710A

AUTHORS: Shilova, Ye. I. and Nikitayeva, O.G. (Moscow)

TITLE: Influence of Small Degrees of Plastic Deformation on the Properties of the Aluminium Alloy D16 (D16) with Various Grain Sizes

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1961, No.2, pp.68-71

TEXT: Deformed aluminium alloys which are hardened by heat treatment (quenching followed by natural or artificial ageing) become considerably softer on heating in the temperature range 200 to 250°C. The degree of softening depends on the composition and also on the structure. In this temperature range Al-Zn-Mg-Cu alloys show the highest degree of softening, whilst alloys of the system Al-Cu-Mg show the least softening. Slight degrees of deformation in the cold state and a coarse grain structure have a positive influence on strength and the authors of this paper studied the simultaneous influence of these two factors. The investigations were made on sheets of the aluminium alloy D16 (4.6% Cu, 1.38 % Mg, 0.6% Mn, 0.35% Fe and 0.25% Si) from normal

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Influence of Small Degrees ...

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E073/E535

production batches. After cold rolling to 2 mm, a part of the specimens were annealed for 4.5 hours at 380 to 400°C, cooled with a speed of 50°C/hour to 250°C and then in air. Directly after rolling and after annealing, all the sheets were hardened by heating in a saltpetre bath for 15 min at 500°C, followed by quenching in water. After quenching, the sheets were straightened. All the sheets, including some which had not been straightened, were then tested at room temperature after artificial ageing for 30 days and also at 200, 250 and 300°C. Furthermore, the time to failure at loads of 20, 10 and 4 kg/mm², respectively, was determined at 200, 250 and 300°C. Sheets hardened from the cold rolled state differed from those hardened from the annealed state only by the grain size, which was approximately four times smaller for the first than for the second state. Slight deformation of both sheets ($\epsilon = 1$ to 3%), after hardening, increases the strength by 1 to 1.5 kg/mm², the yield point by 2 kg/mm² and reduces the relative elongation by 2 to 3 units. For the hardened material, the deformation during straightening has a considerably greater influence on the mechanical properties at elevated temperatures

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Influence of Small Degrees ...

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E073/E535

than it has at room temperature, thereby this influence is greatly affected by the original grain size of the material. Fig.2 shows the influence of the degree of deformation, $\epsilon, \%$, during straightening of sheets quenched from the cold rolled state (continuous lines) and annealed state (dashed lines) on the strength, σ_s , kg/mm^2 at 200, 250 and 300°C for degrees of deformation: 1 - 0%, 2 - 1%, 3 - 2%. Small degrees of deformation have a very positive influence on the long run strength of coarse grain material; considerable differences were encountered between the behaviour of fine grained and coarse grained materials at various temperatures. Fig.3 shows the influence of the degree of deformation, $\epsilon, \%$, during straightening of sheets quenched from the cold rolled (continuous line curves) and the annealed (dashed line curves) states on the long run strength at 200, 250 and 300°C and the stresses 20, 10 and 4 kg/mm^2 , respectively. τ , hours is the time to failure of the specimens. The following conclusions are arrived at: in the temperature range in which hardening phases are rejected from the solid solution the loss in hardness is small (200-250°C for the alloy D16). The strength characteristics in short duration and particularly in long

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Influence of Small Degrees ...

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duration runs can be considerably increased by applying coarse grained material with grain sizes of the order of $400 \mu^2$, which, after quenching, has been straightened by straightening rolls or by stretching with a degree of reduction of 1 to 2%. At temperatures above 270°C coarse grained material which has not been subjected to deformation possesses the highest strength. Coarsening of the grain in cold deformed semifinished products can be produced by quenching from the annealed state. Differing grain sizes can be obtained by controlling the annealing temperature, the heating speed and also the degree of deformation in the cold state prior to annealing or quenching. The strength increase obtained for the Al alloy D16 by means of slight deformation of coarse grained material after quenching, can also be applied for other aluminium alloys. There are 3 figures, 1 table and 15 references: 11 Soviet and 4 non-Soviet.

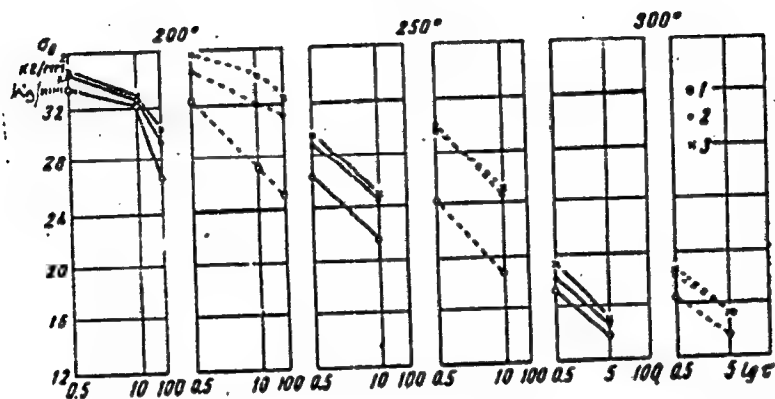
SUBMITTED: September 6, 1960

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Influence of Small Degrees ...

20265
S/180/61/000/002/003/012
E073/E535

Fig.2



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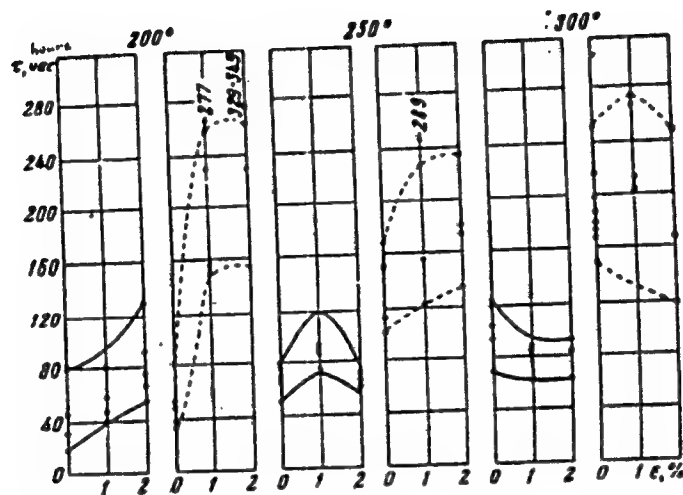
20265

Influence of Small Degrees ...

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E073/E535

X

Fig. 3



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S/129/62/000/011/005/007
E193/E383

AUTHORS: Shilova, Ye.I., Candidate of Technical Sciences and
Nikitayeva, O.G., Engineer

TITLE: Mechanical properties of the alloy D16 (D16) plate
at elevated temperatures

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,
no. 11, 1962, 23 - 27

TEXT: The object of the present investigation was to determine the mechanical properties of alloy D16 plate as a function of its composition and method of fabrication. The composition of the alloy varied within the following limits (%): 4.12-4.79 Cu, 1.28-1.56 Mg, 0.5-0.6 Mn, 0.3-0.38 Fe and 0.26-0.30 Si. The experimental specimens were tested after one of the following treatments: cold-rolling and solution-treatment with and without subsequent stretching (straightening) operation; annealing and solution-treatment with or without subsequent stretching operation. The experimental work included the following: tensile tests conducted at room temperature on specimens aged naturally for 6-30 days; tensile tests at 200 °C conducted on specimens held at the

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E193/E383

Mechanical properties

temperature for 0.5-100 hours; tensile tests at 250 °C on specimens held at the temperature for 0.5 - 20 hours; time-to-rupture tests at 200, 250 and 300 °C. Conclusions: 1) Alloys with the alloying-element content near its lower limit have the lowest strength. 2) Plate that has been straightened by stretching after the solution-treatment has a higher UTS and yield point (both at room and elevated temperatures) than material that has been solution-treated only. 3) As long as the plate is stretched after solution-treatment it does not matter whether the material has been cold-rolled or annealed before the solution-treatment: the strength of both types of materials is about the same and higher than that of unstretched plate. 4) Although some plastic strain (about 1% during the stretching operation) is necessary to improve the mechanical properties of the plate, the variation in the degree of plastic deformation (in the 1-3% range) during stretching has little effect on the mechanical properties of the alloy studied. 5) The stretching operation after solution-treatment is the most important factor determining the time-to-rupture of the plate at 200 °C, the beneficial effect of this treatment being much more pronounced in

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Mechanical properties

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coarsely-granular material. 6) The creep properties of the plate at 250 and 300 °C depend much more on its grain size than on the stretching operation. Specimens solution-treated after annealing have a time-to-rupture twice as long as those that have been solution-treated after cold-rolling and, consequently, have grains three to four times smaller than the former material. There are 3 figures and 2 tables.

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SHILOVA, Ye.I.; NIKITAYEVA, O.G.

Recovery phenomena during the aging of duralumin-type alloys.
Issl. splav. tsvet. met. no.3:62-67 '62. (MIRA 15:8)
(Duralumin--Hardening) (Metals, Effect of temperature on)

SHILOVA, Ye.I., kand.tekhn.nauk; NIKITAYEVA, O.G., inzh.

Mechanical properties of D16 alloy sheets during
heating. Metalloved. i term. obr. met. no.11:23-27

N '62.

(MIRA 15:11)

(Aluminum alloys - testing)
(Metals at high temperatures)

SHILOVA, Ye.I. (Moskva); MESHKOVA, O.V. (Moskva); NIKITAYEVA, O.G. (Moskva);
YELKINA, A.G. (Moskva)

Effect of grain size in D16 and D19 alloys on crack formation
and the strength of welded joints. Avtom. svar. 15 no.8:14-20
Ag '62. (MIRA 15:7)

(Nonferrous alloys—Metallography)
(Sheet metal—Welding)

SHILOVA, Ye.I.; KOROVKINA, L.V.

Comparative study of the composition of solutions and lysimetric
waters in turf-Podzolic soils. Pochvovedenie no.8:11-23 Ag '62.
(MIRA 16:1)

1. Leningradskiy gosudarstvennyy universitet.
(Soils—Analysis) (Podzol)

SHILOVA, Ye.I.; ZELENova, A.F.; KOROVKINA, L.V.

Comparative characteristics of the composition of solutions and
lysimetric waters in newly reclaimed Podzolic soils. Pochvovedenie
no.4:45-59 Ap '63. (MIRA 16:5)

1. Leningradskiy universitet imeni A.A.Zhdanova.
(Podzol) (Soils--Composition)

KAURICHEV, I.S.; KOMAROVA, N.A.; SKRYNNIKOVA, I.N.; SHILOVA, Ye.I.

Methods for studying the chemical composition of the liquid
phase of soil (soil solution). Pochvovedenie no.6:35-47 Je '63.
(MIRA 16:7)

(Soils--Analysis)

ACCESSION NR: AT4037665

S/2981/64/000/003/0237/0250

AUTHOR: Shilova, Ye. I.; Nikitayeva, O. G.; Kozlovskaya, V. P., Vasil'yeva, Ye. N.

TITLE: Heat resistant alloy D 19

SOURCE: *Alyuminiyevy*ye splavy**, no. 3, 1964. *Deformiruyemy*ye splavy** (Malleable alloys), 237-250

TOPIC TAGS: aluminum, aluminum alloy, alloy D 19, heat resistant aluminum alloy, copper admixture, manganese admixture, magnesium admixture, duraluminum, duraluminum mechanical property, duraluminum corrosion resistance

ABSTRACT: According to its composition, the heat-resistant aluminum alloy D 19 of the Al-Cu-Mg-Mn system is an intermediate alloy between D 16 and D17, and is intended for sheets, pressed semifinished products, and rivet wire. The alloy contains 3.2-4.3% Cu, 1.8-2.6% Mn, 0.03-0.15% Ti, 0.0005-0.005% Be and no more than 0.3-0.5% Fe or Si, and 0.1% Zn. In the present paper, the authors report the results of a general investigation of the mechanical properties of D 19 alloy semifinished products. Initial studies concerned the influence of natural aging time (0-30 days) on the mechanical properties of quenched sheet specimens having various compositions, i.e.: Cu and Mg at the lower limit; Cu and Mg at the higher limit; Cu at the higher limit and Mg at the lower limit; Cu at the lower

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ACCESSION NR: AT4037665

limit and Mg at the higher limit. Before quenching, the specimens were in the annealed or cold rolled condition. Other tests were made to determine the effect of heating to 200 and 250 C on the mechanical properties at room temperature of sheet specimens with different histories of heat-treatment and strain hardening. The mechanical properties of sheet and wire specimens were also determined at elevated temperatures (up to 300 C). Furthermore, creep rupture tests were performed on sheet specimens at 175-300 C, and zero-to-tension fatigue tests on specimens previously subjected to various heat treatments or strain hardening operations. Rivets of D 19 P and V 95 were tested at repeated zero-to-maximum shear loads at room temperature and at 175 C. Finally, specimens of D 19 and D 16 alloys under various conditions were tested for corrosion resistance in 3% NaCl or 3% NaCl + 0.1% H₂O₂. On the basis of the results obtained, it was concluded that: the duraluminum type alloy D 19 is a heat-resistant alloy; at temperatures of 20 - 150 C its strength is equal to the strength of D 16 alloy, while at 170-250 C its strength is higher than that of D 16 alloy by approximately 8-10%. Under a repeated static load, the strength of D 19 alloy is similar to that of D 16. Alloy D 19 has a reduced rate of strengthening during natural aging; therefore, cold working operations can be performed with this alloy during a longer period of time (6-8 hours) than with alloy D 16; this property is particularly desirable for riveting material. Products made of alloy D 19, in contrast to D 16, do not exhibit a tendency to intergranular corrosion during heating in the temperature range

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ACCESSION NR: AT4037665

150-250 C because of a more favorable phase composition. In this connection, semifinished products of D 19 alloy can be used in the naturally aged condition in structures working at 20-250 C. "The corrosion resistance was determined by Eng. S. M. Ambartsumyan, the tests with repeated shear loads were carried out by Eng. B. F. Bogdanov under the direction of Doct. Tech. Sci. N. I. Marin, and M. F. Akinfiyeva, V. N. Zhuravleva and T. N. Golokhmatova also took part in the experimental work." Orig. art. has: 5 figures and 8 tables.

ASSOCIATION: none

SUBMITTED: 00

SUB CODE: MM

DATE ACQ: 04Jun64

NO REF SOV: 004

ENCL: 00

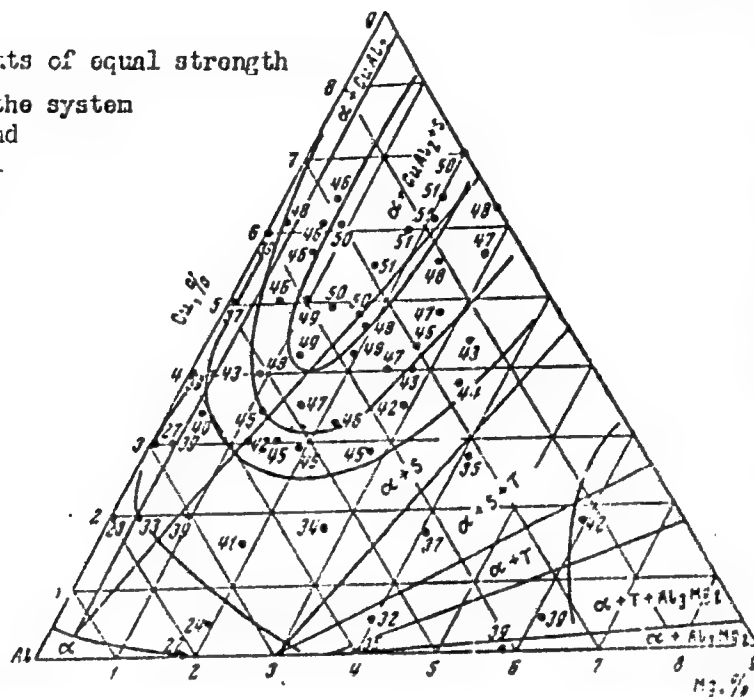
OTHER: 000

Card 3/3

L 39584-66

ACC NR: AT6016413

Fig. 1. Curves connecting points of equal strength limit (kg/mm^2) for alloys of the system Al-Cu-Mg-Mn in the tempered and naturally aged state at normal temperature.



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ACC NO: ATG 10/13

Results were compared with the corresponding results for the industrial alloys D13, V35, D1, D19P, VE17, D16, and D19. It was found that alloys containing 3.5--6% Cu and 2.3% or more Ni showed the least tendency towards crack formation. The corrosion stability of alloy containing 3--5% Cu and 0.5--1% Ni is independent of their phase position, i.e., $\alpha + \text{CuAl}_2 + \text{S}$ or $\alpha + \text{S}$. However, intercrystalline corrosion which results from short-time heating to 150C does depend on the nature of the phase composition. Orig. art. has: 1 table and 7 figures.

SUB CODE: 11/ SUBM DATE: 16Sep65/ ORIG: REF: 011/ OTH REF: 002

Card 3/3

SHILOVA. Ye.I.; KOROVKINA, L.V.

Characteristics of the composition and properties of the solution
of Podzolic soil in a spruce-moss forest based on lysimetric data.
Pochvovedenie no.9:40-47 S '65. (MIRA 18:10)

1. Leningradskiy universitet imeni Zhdanova.

SHILOVA, Ye.I.

Eighth International Congress of Soil Scientists. Vest. LGU 20
no.21:156-158 '65. (MIRA 18:12)

ACC NR: AP6036439

SOURCE CODE: UR/0370/66/000/006/0089/0096

AUTHOR: Shilova, Ye. I. (Moscow); Nikitayeva, O. G. (Moscow); Vasil'yeva, Ye. N. (Moscow)

ORG: none

TITLE: The effect of grain size on the properties of AK4-1 aluminum-alloy sheets

SOURCE: AN SSSR. Izvestiya. Metally, no. 6, 1966, 89-96

TOPIC TAGS: aluminum, copper, magnesium alloy, nickel containing alloy, metal property, grain size/AK4-1 aluminum alloy

ABSTRACT: AK4-1 aluminum alloy sheets (1.5 x 1200 x 3000 mm), cold rolled from fully annealed plates of various thicknesses with reductions of 0.5, 10 and 64%, were solution annealed at $525 \pm 30^\circ\text{C}$ for 15 min and water quenched. One group of sheets was artificially aged at 190°C for 12 and 24 hr, which produced grain sizes of 22—38 μ . Another group of sheets was naturally aged for 3—720 hr. It was found that the duration of natural aging has little or no effect on the elongation. The yield strength and tensile strength are not affected by aging for up to 15 hr, then increase rather sharply, and after about 48 hr remain on the same level. The mechanical properties, especially yield strength, of naturally and artificially aged specimens increase with the decrease of grain size. The optimal grain size was found to be 30—40 μ , which is obtained by a deformation of 10—15%. Subsequent

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UDC: 669.715

ACC NR: AP6036439

aging at 125, 150 and 175C for up to 500 hr had little or no effect on room-temperature mechanical properties or the corrosion and stress corrosion resistance. The creep strength increases with increased grain size; 1.5% deformation (stretch leveling of sheets) after solution annealing lowers the creep strength at 125, 150 and 175C. It was also established that the grain size of the alloy sheets greatly affects the critical degree of deformation. Coarser (35—40 μ) grain sizes and finer dispersion of the secondary phase increase the critical degree of deformation from 1.5—2% to 5% and higher. Orig. art. has: 1 figure and 6 tables.

SUB CODE: 11, 13/ SUBM DATE: 03Jun66/ ORIG REF: 009/ OTH REF: 001/ ATD PRESS: 5108

Card 2/2

CA //A

Products of the reaction between proteins and mineral substances. E. I. Shikora. *Uchenye Zapiski Leningrad. Gosudarst. Univ., Ser. Geol.* 1939, No. 7 (No. 34), 345-60; *Khim. Referat. Zhur.* 1940, No. 1, 61.—Alc. and alk. fractions of wheat flour proteins were investigated. Proteins of the alc. fraction were pptd. very little by $\text{Fe}(\text{OH})_3$, CaSO_4 and $\text{Pb}(\text{OAc})_2$, but formed a considerable residue with SiO_2 . Freshly prepd. SiO_2 soln. had a smaller coagulating effect. The alk. fraction of the proteins was not pptd. by SiO_2 and $\text{Fe}(\text{OH})_3$, but was coagulated by the action of KCl , BaCl_2 , FeCl_3 and HCl . The ash content of the org.-mineral compds. was 33% in the alc. fraction and 13% in the alk. fraction. By the action of 5% H_2SO_4 these compds. were only partly hydrolyzed. The unhydrolyzed part was 31.3% in the alc. fraction and 66.3% in the alk. fraction. In the alc. fraction hydrolyzate the basic amino acids predominated and in the alk. fraction hydrolyzate the monoamino acids were predominant. S. considers that similar protein-mineral compds. can be formed in the soil and they compose the main mass of the humic N.

W. R. Henn

SHILOVA, Ye.I., dots.

P.A. Kostychev, one of the founders of Russian soil science.
Vest. LGU 3 no.12:118-127 D '48. (MIRA 12:9)
(Kostychev, Pavel Andreevich, 1845-1895)

SHILOVA, YE. I.

PA 151T107

USSR/Science - Soil Science
Fauna, Soil

Oct 49

"Characteristics of Methods for Calculating the
Numbers and Sizes of Fauna," Ye. I. Shilova, L. V.
Zhurik, Chair of Experimental Soil Sci, Leningrad
State U, 7 $\frac{1}{2}$ pp

"Pochvoved" No 10

Study of available methods for counting various
groups of soil fauna--hand picking, washing the soil
in sieves, extraction in "Tul'gren's" apparatus--
shows sieve method permits fullest count. Hand
method counts largest forms, but few of fine numeri-
cally predominant forms--Apterygota and Acarina.
Extraction method counts Acarina and insect grubs,
but not Enchytraeidae, Chironomidae larvae, and Ap-
terygota. All the methods can be used to calculate

CA

15

The biological characteristics of the profile of podzolized soils. E. I. Shilova (A. A. Zhukov State Univ., Leningrad). *PODZOLIZOVANIE* 1951, 534-48.—The utilization of the bases by the root system which is coned in the A horizon is considered as the cause of the podzolization effect.

I. S. Joffe

1952

SHILOVA, Ye.I.

Method of direct observation of the microflora of the rhizosphere.
Vest.Len.un. 10 no.1:43-53 Ja '55 (MIRA 8:4)
(Soil microorganisms)

SHILOVA, Ye. I.; KONDRAT'YEVA, K. B.

Some characteristics of the rhizospheres of clover and timothy.
Vest. Len. un. 10 no. 4: 17-24 Ap '55. (MLRA 8:8)
(Rhizosphere microbiology)

SHILOVA, Ye.I.; KREYER, K.G.

Carbon dioxide of the soil solution and its role in soil formation.
[with summary in English]. Pochvovedenie no.7:65-72 J1 '57.

(MIRA 10:11)

1. Leningradskiy ordena Lenina gosuniversitet imeni A.A.Zhdanova.
(Soil formation) (Carbon dioxide)

SHILOVA, Ye.I.

More on the necessity of a critical attitude toward Academician
V.R. Vil'iams theory of the indivisible nature of the process of
soil formation [with summary in English]. Vest. LGU 12 no.9:33-42
'57. (MLRA 10:8)

(Vil'iams, Vasilii Robertovich, 1863-1939)
(Soil formation)

SHILOVA, Ye.I.

Qualitative composition of lysimeter waters of virgin and cultivated Podzolic soils based on data of five-year observations [with summary in English]. Pochvovedenie no.1:86-97 Ja '59. (MIRA 12:2)

1. Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova.

(Podzol)

(Minerals in soil)

SHILOVA, Ye.I.

Present state of the problem of soil evolution and methods of
studying it. Report No.1. Vest.LGU 14 no.15:26-35 '59.
(MIRA 14:4)
(Soil formation)

SHILOVA, Ye.I.

Evolution of the exchange of matter in the biosphere. Report No.2.
Vest. LGU 15 no.3:41-55 '60. (MIRA 13:1)
(Paleontology)

SHILOVA, Ye.I.

Evolution of the exchange of matter and energy in the biosphere.
Report No.3: Latitudinal zonality and saturation of the biosphere
with oxygen resulting from the development of life in the Pre-Quater-
nary period and principal conditions of its recent manifestation. Vest
IGU 15 no.9:37-50 '60. (MIRA 13:4)
(PALEONTOLOGY)

SHILOVA, Ye.I.; KOROVKINA, L.V.

Seasonal dynamics in the chemical composition of lysimeter waters
of Podzolic silt loam soils [with summary in English]. Pochvovedenie
no.3:36-47 Mr '61. (MIRA: 14:3)

1. Leningradskiy gosudarstvennyy universitet.
(Podzol) (Soil moisture)

SHILOVA, Ye.I.; KOROVKINA, L.V.

Comparative specification of the composition of solutions and the lysimetric waters of highly podzolized soils of spruce-oxalis forests. Pochvovedenie no.8:74-81 Ag '61.

(MIRA 14:11)

1. Leningradskiy gosudarstvennyy universitet imeni A.A.Zhdanova.
(Podzol--Analysis)

SHILOVA, Ye.I.; KOROVKINA, L.V.

Dynamics of infiltration and qualitative composition of water measured
by a lysimeter in sandy soil with surface Podzol. Vest. LGU 16
no. 6:106-117 '61. (MIRA 14:4)

(Soil percolation)

SHILOVA, Ye.I.

V.I. Vernadskii and the problem of the development of the
biosphere. Vest. LGU 17 no.9:5-21 '62. (MIRA 15:5)
(Vernadsii, Vladimir Ivanovich, 1863-1945)
(Biology—Philosophy)

S/806/62/000/003/006/018

AUTHORS: Shilova, Ye.I., Nikitayeva, O.G.

TITLE: On the "recovery" phenomenon in the aging of Duralumin-type alloys.

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Issledovaniye splavov tsvetnykh metallov. no.3. 1962, 61-67.

TEXT: The paper describes experimental evidence on the appearance of the "recovery" phenomenon, i.e., a lowering of the hardness and strength of a naturally-aged Duralumin-type material upon short-term heating to 200-300°C to the values first observed directly after quenching, a lowering which upon subsequent aging is recovered again. It is postulated that the "recovery" state of Duralumin is not structurally identical with the freshly-quenched state. D16 (D16) and D19 (D19) sheet material (compositions listed) were tested in two states: (I) quenched, 2%-straightened, and cold-rolled; (II) tempered and quenched without straightening. Specimens of both batches were tested immediately after water quench and after 5-day natural aging. Experimental short-term high-T soaking in a saltpeter bath lasted 30, 60, 120, 240, and 360 sec at 200°C; 0, 20, 45, and 60 sec at 250°C; 0, 10, 20, and 40 sec at 300°C. These times were in addition to a warm-up period of 15-20 sec. Specimens were then water-cooled at 20-25°C and one-half buried in snow (to maintain the freshly-quenched condition) and one-half exposed to aging in air. Test results (over-full-page tabulations) show that an up-to-6-min 200°C heating of D16

Card 1/2

-----language Soviet
ASSOCIATION: None given.

SHILOVA, Ye.S.

Spread and stationary distribution of the gerbil [*Meriones erythraurus* Gray] in the Northern Aral Sea region. *Biul.MOIP. Otd.biol.* 58 no.2:3-7
'53. (MLBA 6:6)

(Aral Sea Region--Jerboas)

SHILOVA, K.T.; SHILOVA, Ye.S.; SHILOV, M.N.

Characteristics of the ecology of the jird (*Rhombomys opimus* Licht.)
during the winter period in the northern Aral Sea region. Biol.MOIP
Otd.biol. 59 no.2:3-14 Mr-Ap '54. (MLRA 7:6)
(Aral Sea region--Rodentia) (Rodentia--Aral Sea region)

SHILOVA, Ye.S.

Wintering habits of *Ancistrodon halys*. Biul.MOIP. Otd.biol. 61 no.4:
86-87 J1-Ag '56. (MIRA 10:8)

(ARAL SEA REGION--SERPENTS)

(ANIMALS, HABITS AND BEHAVIOR OF)

SHILOVA, Ye.S.

Territorial distribution of burrows of some carnivorous mammals and
their relation with the colonies of the greater gerbil. Biul. MOIP.
Otd. biol. 65 no.5:139-140 8-0 '60. (MIRA 13:12)
(ARAL SEA REGION—ANIMALS, HABITATIONS OF)

KRYLOVA, K.T.; VARSHAVSKIY, S.N.; SHILOVA, Ye.S.; SHILOV, M.N.; PODLESSKIY, G.I.;
KOMARDINA, M.G.

Characteristics of interspecific contact in colonies of the greater
gerbil (*Rhombomys opimus* Licht.) in the northern part of the Aral
Sea region. Zool. zhur. 40 no.3:434-446 Mr '61. (MIRA 14:3)

1. Aral Sea Anti-Plague Station and Aral Branch of the Moscow
Society of Naturalists.
(Aral Sea Region—Gerbils as carriers of disease)

ROTSHIL'D, Ye.V.; SHILOV, M.N.; SMIRIN, V.M.; SHILOVA, Ye.S.

Surface food supply piles of the greater gerbil (*Rhombomys opimus*
Licht.). Biul. MOIP. Otd. biol. 66 no.6:43-50 N-D '61. (MIRA 14:12)

(ARAL SEA REGION—GERBILS)
(ANIMALS, FOOD HABITS OF)

KVYATKEVICH, I.K., kand.tekhn.nauk, dotsent; ARBUZOV, S.V., kand.tekhn.nauk;
Prinipalni uchastiye: KRASIKOVA, Z.N.; NASYROVA, Sh.I.;
SOLOV'YEV, N.S.; SHILOVA, Z.F.; ZAYTSEVA, L.V.; KOROTKOVA, L.N.;
KONYL'KIN, A.F.; GLAMAZDA, V.P.; LOZHKINA, V.T.

New simplified method of leather drying and moisturizing.
Izv.vys.ucheb.zav.; tekhn.prom. 3:43-58 '62. (MIRA 15:6)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy
promyshlennosti (for Kvyatkevich). 2. Tsentral'nyy nauchno-
issledovatel'skiy institut kozhevenno-obuvnoy promyshlennosti
(for Arbuzov). Rekomendovana kafedroy mashin i avtomatov
Vsesoyuznogo zaochnogo instituta tekstil'noy i legkoy promysh-
lennosti.

(Leather--Drying)

1. SHILOVA-TRASTOVA, S. A.
2. USSR (600)
4. Hedgehogs
7. Feeding of hedgehogs (*Erinaceus europaeus* L.) in the southern forests. Zool. zhur
31 no. 6 1952.
9. Monthly List of Russian Accessions, Library of Congress, arch 1953. Unclassified.

SHILOVA-PRASSOVA, S. A.

Woodpeckers

Role of the woodpecker Dendrocopos major in the southern forests of the European U.S.S.R.
Izvl. Nauch. Otd. Biol. 57 no.4, 1962.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

SHILOVA-KRASOVA, S.A.

Activity of insectivorous birds in areas of mass propagation of harmful forest insects. Zool.shur. 32 no.5:955-963 S-O '53. (MLRA 6:10)

1. Biologo-pochvennyy institut Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova. (Birds) (Forest insects)

SHILOVA-KRASOVA, S.A.

Birds in the fight against pine pests. Priroda 42 no.9:116-117 S '53.
(MLRA 6:8)

1. Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut Ministerstva zdavookhraneniya SSSR. (Birds--Food) (Pine-moth)

FLINT, V.Ye.; ~~SHILOVA-KRASOVA~~, S.A.

Method of observing a flock of titmice. Zool.zhur. 34 no.6:1386-1388
N-D '55. (MLRA 9:1)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo
universiteta imeni M.V. Lomonosova.

(Titmice)

SHILOVA-KRASOVA, S.A.

Experimental use of starlings for the control of cockchafers in forests
of shelterbelt districts. Biol. MOIP. Oti. biol. 60 no.1:47-50 Ja-F '55.
(Starlings) (Cockchafers) (MLRA 8:7)

SHILOV, ALEXANDER, R. S.

"The Inaccuracies of X-Ray Diagnosis in Stomatology" Stomatologiya, No. 2, 1949.

ZEDGENIDZE, Georgiy Artem'vevich, prof.; SHILOVA-MEKHANIK, Rakhil'
Solomonovna, dotsent; SVIRIDOV, S.A., red.; ROMANOVA, Z.A.,
tekhn. red.

[X-ray diagnosis of diseases of the teeth and jaws; a textbook
for doctors and students] Rentgenodiagnostika zabolevanii zubov
i cheliustei; posobie dlia vrachei i studentov. Moskva, Medgiz,
1962. 283 p. (MIRA 15:9)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for
Zedgenidze).

(TEETH--RADIOGRAPHY) (JAWS--RADIOGRAPHY)

SHILOVETS, D. P.

Manufacture of welded and riveted steel structures: textbook. Izd. 2., dop. i perer
Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1955. 194 p. (55-35573)

TAc24.S53 1955

1. Steel, Structural.

SEILOVICH, I.V.

Zootechnician and veterinarian. Zhivotnovodstvo 20 no.11:91
N '58. (MIRA 11:11)
(Stock and stockbreeding)

PROCESSES AND PROPERTIES OF CHEESE

15

A new method for the determination of the degree of ripeness of cheese. M. K. Shilovsk. *Molokoznaia Prom.* 4, No. 3, 19 21; *Chem. Zvezda* 1937, II, 3974. In the buffer properties of the water-sol. portion of the cheese is a suitable method for detg. the degree of ripeness of Dutch cheeses. The change in buffer properties with age is especially marked in the region of pH 8-10. The best indicators are phenolphthalein and thymolphthalein. Five g. of the cheese is cut up and ground with 15 cc. of water. One 10-cc. portion of the filtrate is titrated against phenolphthalein and another against thymolphthalein, 0.1 N alkali being used in each case. The difference between the 2 titrations is the buffer index of 1 g. of cheese. For cheese 1 month old this value is 0.33; after 5-5.5 months it is 0.100. M. G. Moore

450-556 METALLURGICAL LITERATURE CLASSIFICATION

12

Soluble food casein. M. Shilovich. *Molokhnyy Prom.*
9, No. 4, 27-30(1948). Casein pptd. from defatted milk
is neutralized by baking soda to give a water-sol. casein-
ate, which is readily dried and packaged in form of a
powder. The most readily sol. product is obtained from
casein pptd. at 85°; samples made at 65° are incom-
pletely sol.; the pptn. is best done by 3-6% HCl added in
10-15 min. to pH 4.1-4.2. The final neutralized product
is readily tray-dried at 30-40° initially, and at 65-70° for
the final stage. The product retains 8-10% moisture.
The final product contains about 85% protein. The product
is used for food fortification. G. M. Krasdarni

CA

Effect of moisture content of dry defatted milk on storage quality. M. Shilykh, *Molokaya Prom.* 10, No. 8, 9-10 (1949). — The product may not have over 4% moisture for satisfactory storage in moisture-proof packages. G. M. Kozolapoff

C. A.

12

Determination of ripeness of cheese. M. Shilovich.
Molokhuys Prom. 11, No. 9, 43-4(1950).—The cheese
sample (5 g.), triturated in 45 ml. H_2O , is filtered and 10-ml.
aliquots are titrated with phenolphthalein and with thymol-
phthalein indicators with 0.1 N alkali. The difference in the
titrations is the buffering ability of the cheese, which is a
useful age index; it is expressed in degrees by multiplication
of the liter difference by 100; this ranges from 70 to 200 for
various kinds of cheese. G. M. Kosolapoff

CA

/2

— Stability of dry milk products in storage. S. Shtal'berg and M. Shilovskh, *Molochnaya Prom.* 12, No. 9, 23-4 (1951).—Dried milk, cream, and butter products survive storage better at levels of low moisture content. The use of bitumen-impregnated paper for packing is advised. Generally at 2° less deterioration occurs than at 10°.
G. M. Kosolantov

SHILOVICH, M.; KORNILOVA, O.

Dairy Products - Analysis and Examination

Expedient method for determining solubility of dried milk products. Mol. prom. 12
no. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December ¹⁹⁵² ~~1958~~ Unclassified.

1. KARUNINA, L., SHILOVICH, M.
2. USSR (600)
4. Milk - Analysis and Examination
7. Testing the methods for quickly determining the quantity of protein in milk.
Moloch prom. No 2 1953.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

Chem Abs V 48

1-25-54

J. Vorku

②
Examination of cream and cottage cheese for the pasteurization (temperature) of the starting material. M. Shilovitch and O. Kornilova. *Molochnaya Prom.* 14, No. 9, 34-5 (1953).—Qual. methods based on the thermal inactivation of peroxidase and phosphatase are described for detg. whether the milk and cream used had been flash-heated to 80-86° (at 75° for 10 min.) or held at 63° for 30 min. **Peroxidase test:** Weigh 2 g. of cream or cheese into a test tube and dil. the samples with 2 and 4 ml. of distd. water, resp., add either 5 drops of a special KI-starch reagent and 1 drop of 2% H_2O_2 soln. (I), or 1 ml. of 2% soln. of benzidine in alc. and 1-2 drops of 3% H_2O_2 (II) and shake the samples briefly. Instantaneous appearance of a blue color in I and of greenish blue in II indicate the presence of peroxidase. A fresh KI-starch reagent should be prepd. when a blue color develops in boiled control within 2 min. **Phosphatase test:** Dil. cream or cheese samples (approx. 2 g.) with 2 ml. of water and 4 ml. of 0.1N alkali, resp., add 1 ml. of phenolphthalein phosphate soln. (0.1 g. of substrate in 80 ml. of 1.0N NH_4OH + 20 ml. of 1.0N NH_4Cl) and mix well. Incubate the samples for 30 min. in a water bath at 40-45°. Appearance of the rose-like color within 10-30 min. indicates the presence of phosphatase. V. N. K.

SHILOVICH, M. K.

USSR/Chemical Technology. Chemical Products and Their Application -- Food industry,
I-28

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6674

Author: Shilovich, M. K.

Institution: None

Title: Determination of the Moisture Content of Dairy Products by Means of
the Apparatus Designed by Chizhova

Original
Publication: Moloch. prom-st', 1956, No 3, 28-30

Abstract: Tests of the apparatus designed by Chizhova (Referat Zhur - Khimiya, 1955, 49319) have shown its suitability for a rapid determination of the moisture content of non-fat and fat-containing pot cheese, sweet and salted milk curd products, acidulous paste, whole and non-fat dry milk, dry cream, concentrated milk and cream containing sugar and in concentrated sterilized milk without sugar. 4-5 g of the dairy product are placed into a paper bag, that has been dried and weighed, and are dried therein: pot cheese, acidulous paste and

Card 1/2

BUKHMEN, A.I., kand.med.nauk; SHILOVITSKIY, S.M., mayor med.sluzhby

Case of spontaneous pneumothorax in flight. Voen.-med. zhur.
no. 2:83 F '61. (MIRA 14:2)

(PNEUMOTHORAX)